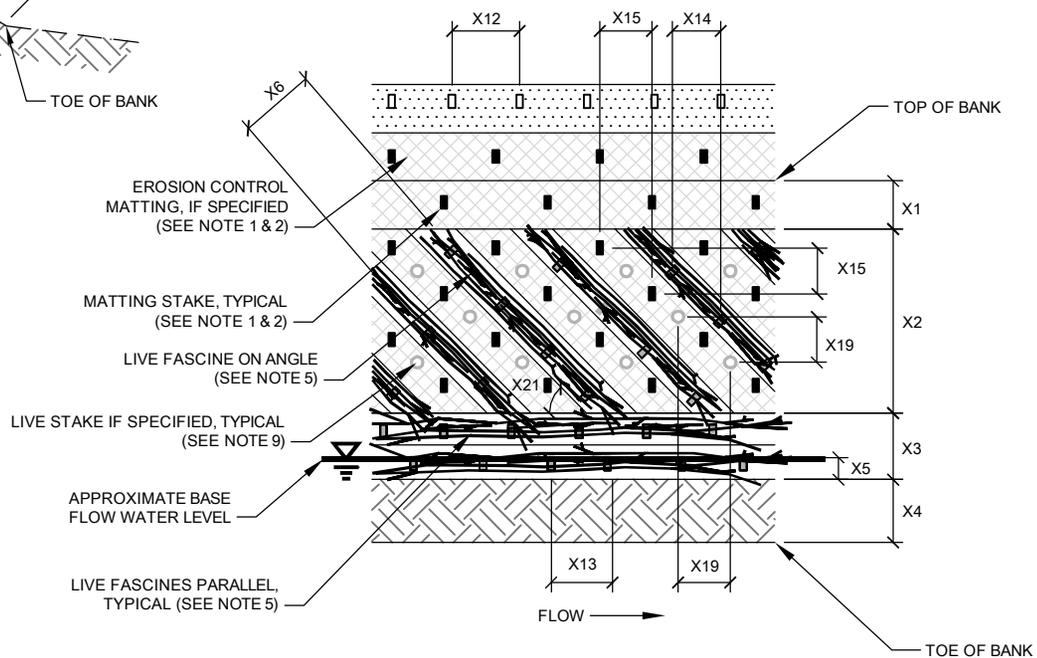


**CROSS-SECTION**



**PLAN VIEW**  
(SEE NOTE 11)

THIS FIGURE IS ONLY MEANT TO DEFINE THE MINIMUM INFORMATION REQUIRED BY THE CITY OF CHARLOTTE TO BE INCLUDED IN A DETAIL FOR THIS TYPE OF TECHNIQUE.  
THIS FIGURE IS NOT MEANT TO REPRESENT A STANDARD DESIGN METHOD FOR THIS TYPE OF TECHNIQUE AND SHALL NOT BE USED AS SUCH.

**NOT TO SCALE**



**CHARLOTTE-MECKLENBURG**  
**STORM WATER SERVICES**  
**GENERIC DETAIL REQUIREMENTS**

**LIVE FASCINES**

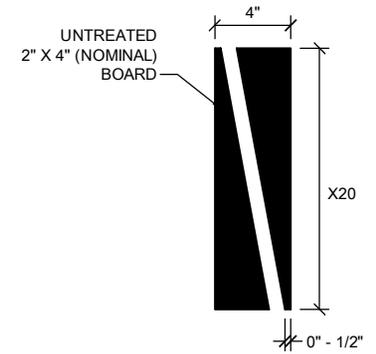
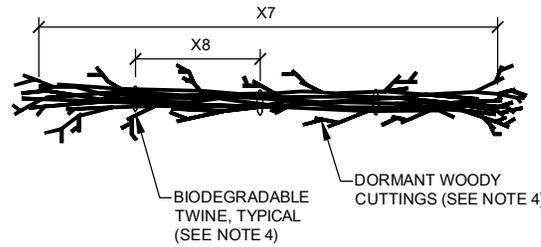
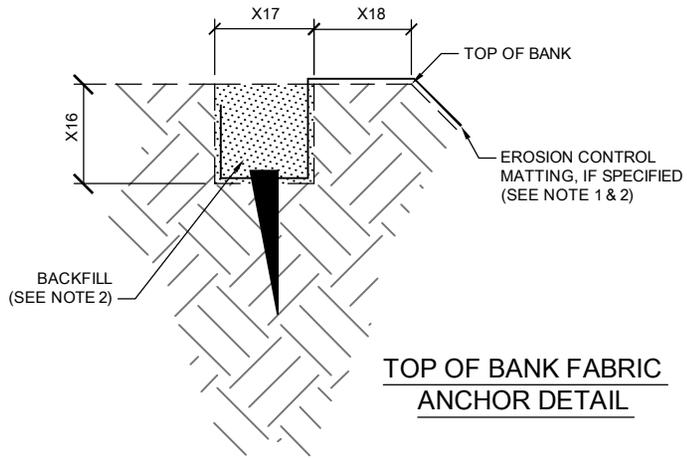
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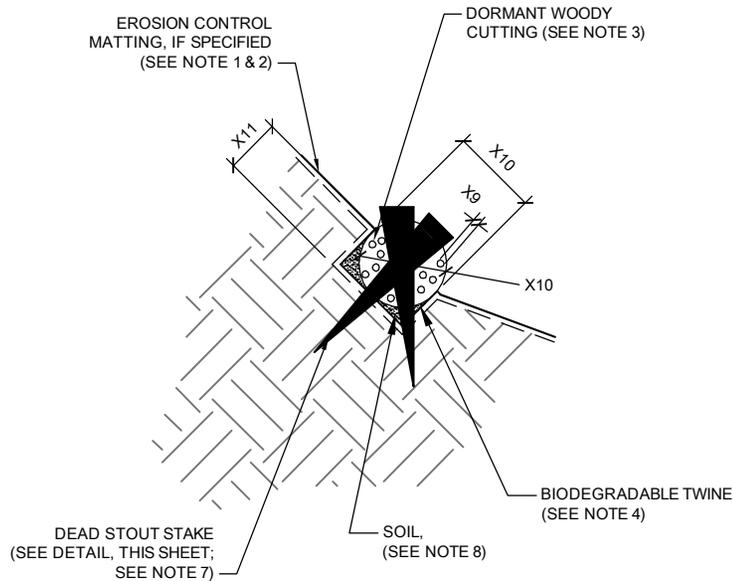
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**DEAD STOUT STAKE DETAIL**



**INSTALLED LIVE FASCINE DETAIL**



**PHOTO: LIVE FASCINES INSTALLED ON ANGLE AND PARALLEL**

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DIMENSIONS (VALUES TO BE DETERMINED BY ENGINEER)			
VARIABLE	VALUES	TYPICAL UNIT	DESCRIPTION
X1		FT. OR IN.	FASCINE PLACEMENT FROM TOP OF BANK
X2		FT.	FASCINE BANK PROTECTION HEIGHT
X3		FT. OR IN.	FASCINE TOE PROTECTION HEIGHT
X4		FT. OR IN.	FASCINE PLACEMENT FROM TOE OF BANK
X5		FT. OR IN.	FASCINE RELATIONSHIP TO APPROXIMATE BASE FLOW WATER LEVEL
X6		FT. OR IN.	FASCINES ON ANGLE SPACING
X7		FT.	FASCINE AND DORMANT WOODY CUTTING LENGTH (MINIMUM AND MAXIMUM, IF APPLICABLE)
X8		FT. OR IN.	FASCINE TWINE FASTENING SPACING
X9		IN.	DORMANT WOODY CUTTING DIAMETER (MINIMUM AND MAXIMUM, IF APPLICABLE)
X10		IN.	FASCINE DIAMETER AND TRENCH WIDTH
X11		IN.	FASCINE INSTALLATION TRENCH DEPTH
X12		FT. OR IN.	DEAD STOUT STAKING SPACING - TOP OF BANK ANCHOR
X13		FT. OR IN.	DEAD STOUT STAKE SPACING IN FASCINES PARALLEL
X14		FT. OR IN.	DEAD STOUT STAKE SPACING IN FASCINES ON ANGLE
X15		FT. OR IN.	MATTING STAKE SPACING
X16		IN.	TOP OF BANK ANCHOR TRENCH DEPTH
X17		IN.	TOP OF BANK ANCHOR TRENCH WIDTH
X18		IN.	TOP OF BANK ANCHOR TRENCH SETBACK FROM TOP OF BANK
X19		FT. OR IN.	LIVE STAKE SPACING
X20		FT. OR IN.	DEAD STOUT STAKE LENGTH
X21		DEGREES	FASCINE ANGLE

**NOTES:**

- FASCINES SHALL BE INSTALLED IN LINEAR TRENCHES ON FINISHED STREAM BANKS. "FINISHED" GENERALLY REFERS TO ANY AND/OR ALL OF THE FOLLOWING AS SPECIFIED BY THE DESIGNER:
  - GRADED
  - PREPARED (ROTO-TILLED, RAKED, AND AMENDED),
  - SEEDED,
  - MULCHED, AND
  - COVERED WITH EROSION CONTROL MATTING.
- INFORMATION REGARDING ACTIVITIES REQUIRED TO FINISH THE STREAM BANKS SHALL BE ADDED TO THE LIVE FASCINE DETAIL OR DETAILED SEPARATELY AND REFERENCED HEREIN.
- IF FASCINES ARE USED AS A SURFACE TREATMENT ON A BANK SCOUR REPAIR, THE DESIGNER SHALL SPECIFY MATERIALS AND METHODS FOR INSTALLATION AND COMPACTING BACKFILL INTO THE SCOUR PRIOR TO FINISHING THE STREAM BANK SURFACE AND INSTALLING LIVE FASCINES.
- FASCINES SHALL BE FABRICATED FROM LIVE DORMANT CUTTINGS OF WOODY PLANT SPECIES (TREES AND SHRUBS) SPECIFIED BY THE DESIGNER AND SHOWN IN THIS DETAIL IN A TABLE OR ELSEWHERE IN THE PLANS (E.G. - A PLANTING PLAN). THE CUTTINGS SHALL BE OF A SPECIFIED LENGTH AND DIAMETER, TIED TOGETHER WITH BIODEGRADABLE TWINE TO FORM A BUNDLE THE SAME LENGTH AS THE CUTTINGS.
- FASCINES SHALL BE INSTALLED PARALLEL TO THE WATER SURFACE OR ON AN ANGLE ON THE STREAM BANK AS SPECIFIED BY THE DESIGNER. TOE PROTECTION FASCINES SHALL ALWAYS BE INSTALLED PARALLEL.
- FASCINE INSTALLATION TRENCH WIDTH SHALL BE SUCH THAT FASCINE FITS SNUGLY WITHIN. FASCINE INSTALLATION TRENCH DEPTH SHALL ALLOW APPROXIMATELY ONE QUARTER OF THE FASCINE TO PROTRUDE ABOVE THE GROUND SURFACE.
- DEAD STOUT STAKES SHALL BE INSTALLED THROUGH THE LIVE FASCINES WITH ONE STAKE PERPENDICULAR TO THE SLOPE OF THE BANK AND THE OTHER PERPENDICULAR TO THE CHANNEL BED. THE TOP OF THE STAKES SHOULD BE FLUSH WITH THE INSTALLED BUNDLE.
- SOIL SHOULD BE PLACED ALONG THE SIDE OF, OVER, AND PRESSED INTO THE FASCINE IN THE TRENCH TO CREATE CONTACT BETWEEN DORMANT WOODY CUTTINGS AND SOIL TO PROMOTE GROWTH.
- LIVE STAKES MAY BE USED IN COMBINATION WITH LIVE FASCINES AS SPECIFIED BY THE DESIGNER. ADDITIONAL INFORMATION REGARDING ANY LIVE STAKING SHALL BE DETAILED SEPARATELY AND REFERENCED HEREIN.
- DETAILED HANDLING, PREPARATION, AND INSTALLATION GUIDELINES FOR LIVE CUTTINGS FOR MAKING FASCINES SHALL BE SPECIFIED BY THE DESIGNER, INCLUDING:
  - LIVE CUTTINGS/FASCINES SHALL BE CUT, FABRICATED, AND INSTALLED ON THE SAME DAY UNLESS OTHERWISE SPECIFIED.
  - SPLIT OR OTHERWISE DAMAGED LIVE CUTTINGS SHALL NOT BE USED.
- THE PLAN VIEW ILLUSTRATES A PERPENDICULAR PERSPECTIVE OF EACH SURFACE DEPICTED IN THE CROSS SECTION. THERE IS NO FORESHORTENING OF THE STREAM BANK (OR ANY OTHER SLOPED SURFACE) IN THE PLAN VIEW.

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**NOT TO SCALE**



CHARLOTTE-MECKLENBURG  
STORM WATER SERVICES  
GENERIC DETAIL REQUIREMENTS

**LIVE FASCINES**

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